

IN THE CLAIMS

Please amend the claims as follows:

1-29. (Canceled).

30. (Currently Amended) A thin-film transistor comprising:

an island-shaped silicon layer which is provided on an insulating substrate;

a source region and a drain region which are provided with an interval on ~~an~~ the
silicon layer on the insulating substrate;

a gate insulator layer which is provided over the ~~interval~~ silicon layer between the
source region and the drain region;

a gate electrode which is provided on the gate insulator layer; and

a source electrode and a drain electrode which are provided on the source region and
the drain region, respectively, wherein

the gate electrode comprises:

a first copper diffusion-preventing layer formed by an electroless metal plating
method on the gate insulator layer;

a copper seed layer ~~which is formed on the first copper diffusion preventing~~
~~layer and of~~ in which an undesired portion is removed on the first copper diffusion-
preventing layer, the undesired portion being a portion other than an area where the
gate electrode is formed;

a copper layer formed on the copper seed layer of which the undesired portion
is removed, the copper layer being formed by an the electroless metal plating method
and a film thickness of the copper layer being greater than that of the copper seed
layer; and

a second copper diffusion-preventing layer ~~covering the~~ surrounding an
exposed surface including ~~[[the]] side[[,]] and upper and lower~~ surfaces of ~~[[the]] a~~
multilayered structure having the copper seed layer and the copper layer, the second
copper diffusion-preventing layer being formed by the electroless metal plating
method, and wherein
the copper seed layer and the copper layer are surrounded by the first copper
diffusion-preventing layer and the second copper diffusion-preventing layer, and have a
forward tapered cross section.

31. (Previously Presented) The thin-film transistor according to claim 30, wherein
the source electrode and the drain electrode comprises:

a third copper diffusion-preventing layer formed on the source region and the drain
region;
a copper wiring layer formed on the third copper diffusion-preventing layer; and
a fourth copper diffusion-preventing layer formed to surround the copper wiring layer.

32. (Canceled).

33. (Previously Presented) The thin-film transistor according to claim 31, wherein a
plurality of the thin-film transistors are arranged to form a matrix, and the thin-film
transistors have scanning lines connected to the gate electrodes of the thin-film transistors,
and signal lines connected to one of the source electrodes and the drain electrodes of the thin-
film transistors, the signal lines being provided such that they are surrounded by the first
copper diffusion-preventing layer and the second copper diffusion-preventing layer.

34. (Previously Presented) The thin-film transistor according to claim 30, wherein the insulating substrate is formed of one of glass, a quartz glass, ceramics, and a resin material.

35. (Currently Amended) A thin-film transistor comprising:
a silicon layer which is provided on an insulating substrate;
a source region and a drain region which are provided with an interval on ~~[[an]]~~ the silicon layer on the insulating substrate:
a gate insulator layer which is provided ~~over the interval~~ on the silicon layer between the source region and the drain region;
a gate electrode which is provided on the gate insulator layer; and
a source electrode and a drain electrode which are provided on the source region and the drain region, respectively, wherein
the ~~gate electrode comprises~~ source electrode and the drain electrode comprise:
a first copper diffusion-preventing layer formed on the ~~gate insulator layer~~ source region and the drain region;
~~a copper seed~~ an organometallic compound material layer having a forward tapered cross section ~~which is formed on the first copper diffusion-preventing layer and of which by removing an undesired portion is removed, the undesired portion being a portion other than an area where the gate electrode is formed;~~
a copper layer having a forward tapered cross section formed on the ~~copper seed layer and having a forward tapered cross section~~ organometallic compound material layer of which the undesired portion is removed; and
a second copper diffusion-preventing layer covering ~~[[the]]~~ an exposed surface including ~~[[the]]~~ side~~[[,]]~~ and upper ~~and lower~~ surfaces of ~~[[the]]~~ a multilayered

structure having ~~the copper seed layer, the copper layer and~~ the first copper diffusion-preventing layer, the copper layer and the organometallic compound material layer, and wherein

the ~~copper seed~~ organometallic compound material layer and the copper layer have a forward tapered cross section and are surrounded by the first copper diffusion-preventing layer and the second copper diffusion-preventing layer.

36. (Previously Presented) The thin-film transistor according to claim 35, wherein the insulating substrate is formed of one of glass, a quartz glass, ceramics, and a resin material.

37. (Currently Amended) A thin-film transistor comprising:
an island-shaped silicon layer which is provided on an insulating substrate;
a source region and a drain region which are provided with an interval on ~~[[an]]~~ the silicon layer on the insulating substrate;
a gate insulator layer which is provided ~~over the interval~~ on the silicon layer between the source region and the drain region;
a gate electrode which is provided on the gate insulator layer; and
a source electrode and a drain electrode which are provided on the source region and the drain region, respectively, wherein
the gate electrode comprises:
a first copper diffusion-preventing layer formed on the gate insulator layer;
a copper seed layer formed on the first copper diffusion-preventing layer;
[[and]]

a copper layer formed on the copper seed layer by an electroless metal plating method, a film thickness of the copper layer being greater than that of the copper seed layer; and

a second copper diffusion-preventing layer covering ~~[[the]]~~ an exposed surface including ~~[[the]]~~ side~~[[,]]~~ and upper ~~and lower~~ surfaces of ~~[[the]]~~ a multilayered structure having ~~the copper layer and the first copper diffusion-preventing layer, the copper layer, and the copper seed layer,~~ and wherein

~~the copper layer is surrounded by the first copper diffusion-preventing layer and the second copper diffusion-preventing layer, and~~ has a forward tapered cross section.

38. (Previously Presented) The thin-film transistor according to claim 37, wherein the insulating substrate is formed of one of glass, a quartz glass, ceramics, and a resin material.

39. (Currently Amended) A thin-film transistor comprising:

a silicon layer which is provided on an insulating substrate;

a source region and a drain region which are provided with an interval on ~~[[an]]~~ the silicon layer on the insulating substrate;

a gate insulator layer which is provided ~~over the interval~~ on the silicon layer between the source region and the drain region;

a gate electrode which is provided on the gate insulator layer; and

a source electrode and a drain electrode which are provided on the source region and the drain region, respectively, wherein

~~the gate electrode comprises~~ source electrode and the drain electrode comprise:

a first copper diffusion-preventing layer formed on the ~~gate insulator layer~~
source region and the drain region;

a nickel seed layer or a seed layer made of a metal material of group VIIla including a cobalt seed layer which is formed on the first copper diffusion-preventing layer and of which an undesired portion is removed, the undesired portion being a portion other than an area where the ~~gate-electrode is~~ source region and the drain region are formed;

a copper layer formed on [[a]] the nickel seed layer or a seed layer made of a metal material of group VIIla including a cobalt seed layer; and

a second copper diffusion-preventing layer covering [[the]] an exposed surface including [[the]] side, upper and lower surfaces of [[the]] a multilayered structure having the nickel seed layer or a seed layer made of a metal material of group VIIla including a cobalt seed layer and the copper layer, and wherein

the nickel seed layer or a seed layer made of a metal material of group VIIla including a cobalt seed layer and the copper layer are surrounded by the first copper diffusion-preventing layer and the second copper diffusion-preventing layer, and have a forward tapered cross section.